

CLASSIFICATION TITLE- SUB-TITLE

Engineering Consultant Electrical Systems Advanced

POSITION SUMMARY

Under the general supervision of the section chief, the position serves as the primary liaison between the department and its authorized municipal and third party agents and assists in the establishment of standards for plan review, inspection, and compliance activities for the Wisconsin Electrical Program. Further, the position provides oversight of the state electrical code compliance and enforcement statutory mandates. This includes uniform code enforcement, uniform code interpretation and uniform code plan review and inspection process and procedures.

SPECIAL REQUIREMENTS

Must be certified and/or hold a current license in the State of Wisconsin as the following: Commercial Electrical Inspector, Uniform Dwelling Code Electrical Inspector, Master Electrician, and be a Wisconsin registered Professional Engineer, graduate of an electrical engineering program or registered designer of engineering systems. Individual must also possess a valid Wisconsin Drivers License.

TIME %

GOALS AND WORKER ACTIVITIES

- A. 40% Administer and provide oversight of the Electrical Delegated Agent Program with authorized municipalities and third party agents, including providing technical consultation regarding the most complex electrical engineering issues.**
- A1. Provide programmatic direction to department staff, certified agents and individuals, municipal inspectors, designers, architects, engineers, contractors and owners on current department electrical codes and regulations to ensure consistent application of the program goals.
 - A2. Develop and implement a program to provide training, mentoring and consultation to department staff, state agencies, certified agents and individuals, municipal officials and inspectors, designers, architects, engineers, contractors, electricians and building owners on current department electrical codes and regulations.
 - A3. Assist in the establishment and execution of a credible review program to monitor and follow up on local authorized and certified agent implementation of codes and standards.
 - A4. In consultation with the Section Chief and Division Management, establish and maintain statewide uniformity of electrical program goals for consistency and uniform enforcement for the design and contracting community.
 - A5. Propose technical interpretations regarding Wis. Admin Code SPS 316 and related NFPA Standards. Obtain and forward technical interpretations of other Division administrative codes as they relate to Wis. Admin Code SPS 316.
 - A6. Prepare concise reports on electrical engineering and electrical system code issues.
 - A7. Perform in-depth technical reviews of code proposals related to electrical systems and determine impacts and means of implementation.
 - A8. Receive and respond to technical inquiries in both written and verbal formats
 - A9. Participate in code development activities

A10. Maintain a log of consultations and activities.

B. 25% Analyze and review commercial electrical engineering plans and/or petitions for variance to ensure compliance with Wis. Adm. Code and adopted national standards.

- B1. Review and interpret plans, specifications and calculations and other submitted materials for compliance with applicable codes, including but not limited to SPS 316, 305, NFPA 70, 110 and 111.
- B2. Draft written decisions and make recommendations on approval or denial of plans including conditions of approval which establish compliance with applicable codes.
- B3. Review and make final determination on petitions for variance as specified in SPS 303, Wis. Admin Code.
- B4. Apply engineering principals and practices to determine if plans and any submitted petitions for variance provide equivalent degrees of safety as established by code.
- B5. Make written and telephone follow-up inquiries for response regarding the status of unresolved code requirements or problems.
- B6. Respond to telephone and written questions regarding plan submittal, fees and plan review actions for projects assigned.
- B7. Enter required information into plan review and scheduling systems.
- B8. Confer with Section Chief on precedent-setting petitions.
- B9. Maintain a log of plan review and petition for variance review activities.

C. 20% Provide standards and compliance review through field consultations and inspections.

- C1. Provide consultation at assigned sites for compliance with Wis. Admin Code SPS 316.
- C2. Conduct inspections to establish compliance with Wis. Admin Code SPS 316. Issue orders in accordance with Division policy when appropriate to correct violations.
- C3. Follow Division guidelines for compliance actions and/or prosecution when orders have not been satisfied.

D. 15% Manage and provide guidance to the electrical certification program including education and examination activities.

- D1. Develop consistent standards and guidelines for the approvals of external educational and training courses and materials.
- D2. Analyze and make final determinations on submitted educational and training approvals.
- D3. Assist the Division of Professional Credentialing Processing with the creation and revision of credentialing examinations to ensure the most accurate and up-to-date information is reflected.
- D4. Develop an annual plan for conducting training, including identifying potential external training partnerships, determining topics and priorities, and recommending a schedule of sessions.

- D5. In coordination with Division staff, implement the approved annual training plan, including developing specialized and highly technical training manuals.
- D6. Develop instructional materials, handbooks, guides and/or forms for training fire department staff to conduct electrical inspections.
- D7. Coordinate with appropriate division staff to present information regarding electrical system issues including appropriate administrative code references.
- D8. Provide other tasks as assigned by the supervisor

KNOWLEDGE, SKILLS AND ABILITIES

- 1. Expert knowledge of design, construction, installation, inspection, testing and maintenance of electrical systems.
- 2. Expert understanding of and applying engineering principles/practices to electrical systems.
- 3. Firm understanding of appropriate Wisconsin Statutes, Administrative Code, and adopted national standards, including but not limited to, State Statute 101, Adm. Code ch. SPS 316, 305; NFPA 70, 110 and 111.
- 4. Knowledge of the agency's mission, goals, and plans.
- 5. Effective oral communication skills in dealing with department staff, other government agencies, professional organizations, and the public.
- 6. Ability to assemble, appraise, and organize facts to logically, clearly, and concisely present information in accepted oral and written forms.
- 7. Skill and ability to reach consensus on potential conflict issues.
- 8. Skill in and ability to prioritize tasks and respond to issues determined to be critical and/or urgent.
- 9. Skill in mediation of conflict.
- 10. Ability to effectively analyze and make recommendations related to Wisconsin Administrative Code, Wisconsin Statutes, and Division procedures.
- 11. Highly skilled in preparation and evaluation of high technical reports, work logs, orders, and other required written documentation.